

REMARKS

This application is being abandoned in favour of a Continuation-in-Part application filed herewith. The Continuation-in-Part application addresses the objection raised within the present application that the phrase "close to" in the independent claims is ambiguous. The new independent claim 1 in the Continuation-in-Part application defines a homing frequency bandwidth as being that of the antenna when expressed as a percentage. The example is given of the use of a monopole antenna so that the homing frequency limits are sixteen percent. Sixteen percent of the main frequency is then used as the limits of the homing frequency centered on the main frequency.

In the Office Action presently outstanding on the present application, Examiner stated: "Claims 1, 3, and 5-6 are rejected ... as being anticipated by Cardamone. In regard to claim 1, Cardamone discloses a search and rescue beacon comprising a main transmitter transmitting a Cospas-Sarsat signal at a main frequency and an auxiliary homing transmitter transmitting a homing signal at a homing frequency close to said main frequency (col. 1, lines 8-15). Note that the homing signal and beacon signal can be on one frequency. ..." (emphasis added) Independent claim 15 was rejected as being obvious over Cardamone et al.

Applicant notes that Cardamone (in the Background at col. 1, lines 8-15) states: *"EPIRBs are intended for use by mariners in an emergency situation. According to international agreement, the EPIRB transmits a homing signal and a beacon signal on one or more predetermined frequencies for reception by search and rescue satellite aided tracking ("SARSAT") satellites in orbit around the earth. ..."* No reference is made at all to the main frequency and homing frequency being close to one another. With respect, the Examiner's statement, "Note that the homing signal and beacon signal can be on one frequency," is incorrect. It is an inadvertent misinterpretation of the meaning of the sentence *"... the EPIRB transmits a homing signal and a beacon signal on one or more predetermined frequencies..."*.

What follows is an explanation of the correct meaning of the Cardamone's background statement. The *"international agreements"* refer to the agreements coordinated by

the International Telecommunications Union (ITU), the International Maritime Organization (IMO), the International Civil Aviation Organization (ICAO), and the Cospas-Sarsat secretariat. Many national regulations are based on these international agreements. In the United States, national requirements include those published by the FAA, USCG, RTCM, and of course the FCC.

The “*predetermined frequencies*” are 121.5 MHz, 243 MHz, and 406 MHz.

The 121.5 MHz and 243 MHz homing frequencies are low power (25mW to 100 mW – depending on the beacon), continuous transmission homing transmitters. These homing transmitter frequencies and signal parameters are well defined by the ITU. The 121.5 MHz receivers are typically used on all search and rescue aircraft and vessels worldwide with the 243 MHz typically used as a military frequency. The main beacon signal transmission is in the 406.0 – 406.1 MHz frequency band, and is a well defined 5 watt, digitally encoded, burst signal that has a duration of approximately 0.5 seconds and transmits once every 50 seconds. This signal again is well defined by existing international specifications and standards and is controlled by the Cospas-Sarsat secretariat.

The statement “... *the EPIRB transmits a homing signal and a beacon signal on one or more predetermined frequencies...*”, means that different EPIRBs can be configured differently. Some EPIRBs consist of only the homing frequency transmitter such as 121.5 MHz only, or 121.5 MHz and 243 MHz. Other EPIRBs incorporate the newer 406 MHz transmitter as well as 121.5 MHz homing transmitter or as well as with both 121.5MHz and 243 MHz homing transmitters. Cardamone merely is re-stating the conventional approaches and neither teaches nor suggests that the homing transmitter in a beacon can be the same frequency (or close to) the frequency of the main beacon signal, for example in the 406 MHz band. To infer this from the Cardamone reference, in particular from col. 1 line 8-15, is to distort with the benefit of hindsight the clear meaning of the passage to one skilled in the art when the passage is appropriately taken in context. It is only with the benefit of hindsight that, given Cardamone, one skilled in the art would move a homing transmitter frequency close to the main transmitter frequency.

With regards to the rejection of the dependent claims, applicant submits that those claims are patentable for at least the reason that they depend from independent claims which patentably distinguish over the prior art.

REQUEST FOR EXTENSION OF TIME UNDER 37 CFR, SECTION 1.136

Applicant hereby requests a one month extension of time to respond to the Office Action to and through December 6, 2004.

Respectfully submitted,
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